

dispersion or solution coating. It was stated that pigmenting powder coatings with conventional pigments, including metallic flakes is well known, as shown by the claims of Kranig et al.

Applicants submit that the instant claims are not obvious over Johnson in combination with Kranig et al. for the reason that Johnson does not teach a powder-based coating, nor does it teach a the same color effect as described in the instant claims. Johnson teaches a coating comprising a pigment that is optically variable thin film dichroic flakes comprising a metal reflector layer having first and second parallel planar surfaces and a transparent dielectric layer and the coating also includes interference mica of a similar interference color to that of one of the dichroic colors of the optically variable thin film pigment. The interference mica interacts with the interference color of the optically variable pigment in Johnson to maintain the dichroic effect and chromaticity. The instantly claimed coating does not include an interference mica as defined in Johnson.

Kranig teaches applying a pigmented water-thinnable basecoat, preferably pigmented with aluminum flake, and a powder clearcoat over the basecoat and preferably baking the two coatings simultaneously. In the instantly claimed invention the coating is a powder coating comprising the pigment as instantly claimed where said pigment interacts with the substrate color to provide a distinct color effect from the substrate. The optically variable pigmented coating interacts with the color of the substrate to provide an optically variable effect with good dichroic effect and chromaticity without the addition of an interference mica to the optically variable pigment.

Johnson is further distinguished from the present invention as it does not teach, suggest or define a solution to the problem of obtaining good color shift from an effect pigment in a powder coating composition. In coatings such as those taught in Johnson, the effect pigment is preferably utilized in a solvent borne or waterborne composition. Generally in a liquid coating composition such as that taught by Johnson, a metallic pigment such as aluminum or an effect pigment obtains the optically variable effect due to solvent in the coating, (solvent may include water). Pigment orientation is enhanced because, upon heating, the solvent volatilizes and the film shrinks to facilitate optimum

pigment orientation. In a powder coating there is no solvent and the film does not shrink upon curing. Thus the pigment does not obtain an optimum orientation. Color shift and color travel are compromised because alignment of the pigment is random where there is no film shrinkage or solvent evaporation. This is demonstrated, for example, where a pigment such as aluminum flake is used in powder and a battleship gray color results instead of a shiny silver appearance with good gloss and distinctness of image (doi), that a solvent or water borne composition provides.

Applicants submit that the references do not suggest the unexpected result of obtaining a powder coating containing the effect pigments of the present invention that provides good color travel and a bright appearance upon curing. For this reason, Applicants submit that the instant claims are patentable over the prior art.

Applicants therefore request consideration and allowance of the claims.

Respectfully submitted,

Anne G. Sabourin

Registration No. 33,772

BASF Corporation 26701 Telegraph Rd. Southfield, MI 48034 (248) 948-2021 January 7, 2003